

On the Male Genital Armature in the European Rhopalocera.  
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(Abstract.)

IN several orders of the Insecta the structure of the organs upon which the perpetuation of the species depends has afforded, in very many cases, the best and surest characters for the discrimination of species. But in the Lepidoptera, one of the largest of the orders, and that on which perhaps the greatest amount of attention (scientific or otherwise) has been bestowed, the structure of these parts has not received the consideration it deserves, but has been almost entirely ignored.

The author in confining himself to the European forms is not prepared to admit that his conclusions thereon will hold good with the Lepidoptera in general, though there are certain indications that it may.

He has selected *Epinephele hyperantus*, L., as a type or standard, and describes its apical segment, noting that in this and all cases it is necessary to clear away the scales and hairs for a clear and satisfactory view of the parts to be obtained. The appendages are three, viz. a superior and two lateral ones. To the latter he applies the name "harpagones," though possibly equivalents of the *appendices inferiores* in Trichoptera. The upper appendage he designates "tegumen;" and he takes notice of the relations of all three to the anal opening and intromittent organ &c.

He has discussed the structure of the apical segment, and its modifications in various families, the nature and varied character of the tegumen and of the harpagones, comparing the resemblances and differences in groups. From these data he then traces the apparent affinities as derived from the said characters, and gives it as his opinion that not only do they yield good generic distinctions, but that in many cases specific differentiation is very appreciable. In his researches the author has made a great number of sketches, which illustrations render comparison relatively easy. These and the complete paper will hereafter be published in the Society's 'Transactions.'

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